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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/814,925	03/31/2004	Youssef Drissi	END920040007US1	6345

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HOFFMAN WARNICK LLC  
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EXAMINER
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KANG, INSUN

ART UNIT	PAPER NUMBER
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2193

NOTIFICATION DATE	DELIVERY MODE
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02/24/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTOCommunications@hoffmanwarnick.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/814,925	<b>Applicant(s)</b> DRISSI ET AL.	
	<b>Examiner</b> INSUN KANG	<b>Art Unit</b> 2193	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8, 10-16, 18 and 20-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10-16, 18, and 20-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. This action is responding to RCE amendment filed on 1/30/2009.
2. Claims 1-8, 10-16, 18, and 20-24 are pending in the application.

#### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-8, 10-16, 18, and 20-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hughes (US 2005/0160395), in view of Shimada (US patent 6,697,965), and further in view of Andrews et al. (US 2004/0117761) hereafter Andrews.

Per claim 1:

Hughes discloses: receiving sets of source code from a plurality of sources (i.e. page 5, 0043, lines 20-29). Hughes does not explicitly teach extracting at least one code pattern from the sets of source code. However, Shimada teaches that such extraction of code pattern was known in the pertinent art, at the time applicant's invention was made, to identify a set of similar code fragments (i.e. col. 7 lines 5-15). It would have been obvious for one having ordinary skill in the art to modify Hughes' disclosed system to incorporate the teachings of Shimada. The modification would be obvious because one having ordinary skill in the art would be motivated to identify a repeatedly generated similar code pattern in Hughes.

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Hughes further discloses defining meta data for each of the at least one code pattern that indicates a quality of the at least one code pattern (i.e. “ compared to the specification and evaluated on their implementation of the specified functionality and compliance with the structured development methodology 220,” page 5, 0043, lines 10-20; “methodology database,” page 12, 0103; 0048); assigning a rank to each of the at least one code pattern based on the corresponding meta data (i.e. page 10, 0088; page 11, 0090).

Hughes does not explicitly teach storing each of the at least one code pattern and the assigned rank in a data structure. However, Andrews teaches that storing a ranked quality measure and related data was known in the pertinent art, at the time applicant's invention was made, to reuse to determine the quality of other code with similar code pattern (i.e. 0044; 0045; 0048). It would have been obvious for one having ordinary skill in the art to modify Hughes' disclosed system to incorporate the teachings of Andrews. The modification would be obvious because one having ordinary skill in the art would be motivated to make the previously calculated code quality rank available to subsequent code with similar code patterns for comparison so that the stored quality rank can be reused.

Andrews further discloses receiving a subsequent set of source code source that is developed independently from all of the at least one code pattern stored in the data structure (i.e. 0045); Shimada further discloses extracting a code pattern to be tested from the subsequent set of source code (col. 7 lines 5-15). Hughes further discloses classifying a code pattern to be tested from the subsequent set of source code (i.e. page 5, 0043, lines 10-20) but does not explicitly teach comparing the code pattern to be tested to the at least one code pattern stored in the data structure to determine a closest match to the code pattern to be tested. However, Andrews teaches

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storing the quality measure and related data for comparison with subsequent code (i.e. 0044; 0045; 0048). Therefore, it would have been obvious for one having ordinary skill in the art to modify Hughes' disclosed system to compare the code pattern to be tested to the code stored in the data structure in Andrews to determine the closest match from the stored calculations data.

Hughes further discloses assigning a rank of the closest match to the code pattern to be tested (i.e. page 10, 0088; page 11, 0090); and detecting a software development best practice violation if the rank assigned to the code pattern to be tested fails to comply with a predetermined threshold (i.e. page 10, 0088) .

Per claim 2:

Hughes further discloses: wherein the rank is further based on a skill level of a developer of the at least one code pattern (i.e. page 6, 0051). Hugh and Shimada do not explicitly teach an experience level of the developer. However, it would have been obvious for one having ordinary skill in the art at the time the invention was made to modify Hughes and Shimada' disclosed rating criteria to include developer's experience for expediting the criteria if desired.

Per claim 3:

Hughes further discloses: determining a programming language of the sets of source code (i.e. "identify a language," 0046).

Per claim 4:

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Hughes further discloses the meta data for each of the at least one code pattern identifies the programming language (i.e. “identify a language,” 0046), a list of most used classes, a list of dependencies, a number and a type of objects created and used at run time and memory usage of the at least one code pattern (i.e. “measure memory usage,” page 12, 0104). Hugh and Shimada do not explicitly teach the meta data identifying a list of most used classes, a list of dependencies, a number and type of objects created and used at run time. However, it would have been obvious for one having ordinary skill in the art at the time the invention was made to modify Hughes and Shimada’s disclosed specification methodology to include other more performance metrics for code quality evaluation, if desired.

Per claim 5:

Hughes further discloses wherein the plurality of sources comprises a plurality of nodes interconnected in a peer-to-peer network environment, and wherein each of the plurality of nodes is operated by a developer (i.e. “distributed via the communications server 212 to a one or more developers....a distributed community of programmers,” page 6, 0049; 0098).

Per claim 6:

Hughes further teaches registering the developers, prior to the receiving step (i.e. “posting subsystem 708 identifies the users based on their role or roles (0100).”

Per claim 7:

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Hugh discloses collecting the skill level of developers (i.e. page 6, 0051) but does not explicitly teach that the registering step comprises collecting contact information and an experience level corresponding to the developers. However, it would have been obvious for one having ordinary skill in the art at the time the invention was made to modify Hughes and Shimada's disclosed code ranking system to register the participating developers collecting contact information and an experience level for the purpose of tracking each developers and expediting the ranking criteria.

Per claim 8:

Hughes further discloses: collecting feedback information about each developer from the other developers (i.e. "comments from the review board," 0063; 0063).

Per claims 10-16, they are other method versions of claims 1-8, respectively, and are rejected for the same reasons set forth in connection with the rejection of claims 1-8 above.

Per claim 18, it is another method version of claim 1, respectively, and is rejected for the same reasons set forth in connection with the rejection of claim 1 above.

Hughes further discloses: receiving a first set of source code in a best practice violation (BPV) engine (i.e. col. 6 lines 0048, "The methodology can include best-practice," 0048).

Per claims 20-24, they are other method versions of claims 1-8, respectively, and are rejected for the same reasons set forth in connection with the rejection of claims 1-8 above.

### ***Response to Amendment***

5. The amendments to the claims filed on 1/30/2009 do not comply with the requirements of 37 CFR 1.121(c) because: Per claim 1, in line 6, "and" was previously deleted. Per claim 10, in

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line 7, "and" was previously deleted. Per claim 15, in line 2, the underlined "on" and "an" were previously presented and 'a' in [[]] was previously deleted.

### ***Response to Arguments***

6. Applicant's arguments filed on 1/30/2009 have been fully considered but they are not persuasive.

The applicant states that any comparisons in Andrews are not between pieces of code in a database and code developed independently from those pieces of code but rather of subsequent versions of code that are developed from the previous versions.

In response, the claims do not specifically limit what "code developed independently" means. Furthermore, the specification also does not explicitly define the scope of "independently developed code." Therefore, since the subsequent version in Andrew is not the originally written version, it can be also considered to be independently developed for being a different version from the original version.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to INSUN KANG whose telephone number is (571)272-3724. The examiner can normally be reached on M-F 8:30-5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lewis A. Bullock, Jr. can be reached on 571-272-3759. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications



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may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Insun Kang/

Examiner, Art Unit 2193